AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1.   (Currently Amended) A method for managing a set of database elements in an INFINIBAND architecture utilizing a plurality of subnet managers, each subnet manager capable of assuming a master subnet manager function, comprising:

assuming, by one of the plurality of subnet managers, the master subnet manager function;

storing the set of database elements in the assuming subnet manager;

replicating the set of database elements in a subnet manager not assuming the master subnet manager function;

updating the replicated set of database elements if any changes are made to the set of database elements; and

computing a~~derived~~ ~~version of the set of~~ database elements independent of which of the plurality of subnet managers assumes the master subnet manager function.

2.   (Currently Amended)   The method of claim 1, wherein computing comprises the master subnet manager function computing the derived ~~version of the~~ database elements.

3.   (Currently amended) The method of claim 1, wherein the derived ~~version of the set of~~ database elements ~~are~~ <u>is</u> ~~is~~ identical ~~to the replicated set of database elements and the set of database elements~~ regardless of which of the plurality of subnet managers assumes the master subnet manager function.

4.   (Currently Amended) The method of claim 1, wherein computing comprises computing the derived ~~version of the set of~~ database elements deterministically regardless of which of the plurality of subnets managers assumes the master subnet manager function.

5.   (Currently Amended) The method of claim 1, further comprising the master subnet manager function initializing the INFINIBAND architecture subnet utilizing the derived ~~version of the set of~~ database elements.

6.   (Currently Amended) The method of claim 1, further comprising:

creating the replicated set of database elements at a standby subnet manager;

the standby subnet manager assuming the master subnet manager function;

the master subnet manager function computing the derived ~~version of the set of~~ database elements; and

the master subnet manager using the replicated set of the database elements and the derived version of the set of database elements to initialize the INFINIBAND architecture subnet.

7.   (Currently Amended) The method of claim 1, wherein the derived ~~version of the set of~~ database elements comprises a local identifier assignment.

8.   (Currently Amended) The method of claim 1, wherein the derived ~~version of the set of~~ database elements comprises a tree determination.

9.   (Currently Amended) The method of claim 1, wherein the derived ~~version of the set of~~ database elements comprises a forwarding table assignment.

10.   (Previously Presented) The method of claim 9, wherein the forwarding table assignment comprises one of a linear forwarding table assignment and a multicast forwarding table assignment.

11. (Currently Amended) An architecture node configured to form at least a portion of an INFINIBAND architecture subnet having a plurality of architecture nodes, a plurality of subnet managers configured to store database elements, and a master subnet manager function, the architecture node comprising:

a first subnet manager of the plurality of subnet managers capable of assuming the master subnet manager function; and

a subnet manager function configured to manage the database elements if the first subnet manager assumes the master subnet manager function, generate a replicated version of the database elements if a second subnet manager assumes the master subnet manager function, and compute a derived ~~version of the~~ database elements independently of which of the plurality of subnet managers assumes the master subnet manager function.

12. (Currently Amended) The INFINIBAND architecture node of claim 11, wherein the derived ~~version of the~~ database elements ~~is~~ are identical to the database elements and the replicated version of the database elements regardless of which of the plurality of subnet managers assumes the master subnet manager function.

13. (Currently Amended) The INFINIBAND architecture node of claim 11, wherein the derived ~~version of the~~ database elements are computed computing deterministically regardless of which of the plurality of subnet managers assumes the master subnet manager function.

14.   (Currently Amended)   The INFINIBAND architecture node of claim 11, wherein the master subnet manager function is configured to initialize the INFINIBAND architecture subnet utilizing the derived ~~version of the~~ database elements.

15.   (Currently Amended)   The INFINIBAND architecture node of claim 11, wherein the replicated version of the database elements is created at the INFINIBAND architecture node, and wherein the master subnet manager is configured to use the replicated version of the database elements and the derived ~~version of the~~ database elements to initialize the INFINIBAND architecture subnet.

16.   (Currently Amended)   The INFINIBAND architecture node of claim 11, wherein the derived ~~version of the~~ database elements comprises a local identifier assignment.

17.   (Currently Amended)   The INFINIBAND architecture node of claim 11, wherein the derived ~~version of the~~ database elements comprises a tree determination.

18.   (Currently Amended)   The INFINIBAND architecture node of claim 11, wherein the derived ~~version of the~~ database elements comprises a forwarding table assignment.

19.   (Previously Presented) The INFINIBAND architecture node of claim 18, wherein the forwarding table assignment comprises one of a linear forwarding table assignment and a multicast forwarding table assignment.

20.   (Currently Amended) A computer-readable medium containing computer instructions for instructing a processor to perform a method for computing a derived ~~version of~~ database elements in an INFINIBAND architecture subnet a plurality of nodes, the instructions comprising:

assuming, by one of the plurality of subnet managers, the master subnet manager function;

storing the database elements in the assuming subnet manager;

replicating the database elements in a subnet manager not assuming the master subnet manager function;

updating the replicated database elements if any changes are made to the database elements; and

computing the derived ~~version of the~~ database elements independent of which of the plurality of subnet managers assumes the master subnet manager function.

21.   (Currently Amended)   The computer-readable medium of claim 20, wherein computing comprises the master subnet manager function computing the derived ~~version of the~~ database elements.

22.   (Currently Amended)   The computer-readable medium of claim 20, wherein the derived ~~version of the~~ database elements ~~is~~ are identical to the replicated version of the database elements and the database elements regardless of which of the plurality of subnet managers assumes the master subnet manager function.

23. (Currently Amended) The computer-readable medium of claim 20, wherein computing comprises computing the derived ~~version of the~~ database elements deterministically regardless of which of the plurality of subnet managers assumes the master subnet manager function.

24. (Currently Amended) The computer-readable medium of claim 20, further comprising the master subnet manager function initializing the INFINIBAND architecture subnet utilizing the derived ~~version of the~~ database elements.

25. (Currently Amended) The computer-readable medium of claim 20, further comprising:

creating the replicated version of the database elements at a standby subnet manager;

the standby subnet manager assuming the master subnet manager function;

the master subnet manager function computing the derived version of the database elements; and

the master subnet manager using the replicated version of the database elements and the derived ~~version of the~~ database elements to initialize the INFINIBAND architecture subnet.

26. (Currently Amended) The computer-readable medium of claim 20, wherein the derived ~~version of the~~ database elements comprises a local identifier assignment.

27.   (Currently Amended)   The computer-readable medium of claim 20, wherein the derived ~~version of the~~ database elements comprises a tree determination.

28.   (Currently Amended)   The computer-readable medium of claim 20, wherein the derived ~~version of the~~ database elements comprises a forwarding table assignment.

29.   (Previously Presented)   The computer-readable medium of claim 28, wherein the forwarding table assignment comprises one of a linear forwarding table assignment and a multicast forwarding table assignment.